## STIC Biotechnology Systems Branch

## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

**Application Serial Number:** 

Source:

Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.4.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- 3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
  U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
  Alexandria, VA 22314

Revised 01/10/06

## **Raw Sequence Listing Error Summary**

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 10 573/ 130
ATTN: NEW RULES CASES:	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s)contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:  (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing.  Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13 Misuse of n/Xaa	"n" can only represent a single <u>nucleotide</u> ; "Xaa" can only represent a single <u>amino acid</u>
	AMC - Biotechnology Systems Branch - 09/09/2003



(pg.7)

**IFWP** 

RAW SEQUENCE LISTING DATE: 04/04/2006 PATENT APPLICATION: US/10/573,130 TIME: 10:13:06

Input Set : A:\Final Sequence list-13111-00035-US.txt

Output Set: N:\CRF4\04042006\J573130.raw

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            Kesseler, Maria
             Hauer, Bernhard
             Friedrich, Thomas
     6
            Breuer, Michael
     9 <120> TITLE OF INVENTION: Methods for the production of
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     12 <130> FILE REFERENCE: 13111-00035-US
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C--> 14 <141: CUNTENT FILING DATE: 2005-03-23
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     17 <150> PRIOR APPLICATION NUMBER: DE 103 45 772.0
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	_		. Val	. Gly	Thr	Pro		Gln	lle	Gln	Phe		e Glr	1 His	a Ası	Ser	
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	-	Sei	val			Thr	Thr	Thr			Tir	), ALC	ј Буз			ı Ala	
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		GIL	ı Phe	val		_	о СТУ	у СТУ	TYY			i GII	1				
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RAW SEQUENCE LISTING DATE: 04/04/2006 PATENT APPLICATION: US/10/573,130 TIME: 10:13:06

Input Set : A:\Final Sequence list-13111-00035-US.txt

Output Set: N:\CRF4\04042006\J573130.raw

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254 Ile Lys Leu Ala Glu Glu Gly Tyr Ser Val Thr Ile Ala Ser Arg Gly

48

96

RAW SEQUENCE LISTING DATE: 04/04/2006
PATENT APPLICATION: US/10/573,130 TIME: 10:13:06

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Output Set: N:\CRF4\04042006\J573130.raw

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	Leu																
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	Ile	Ата		Ата	GIn	Inr			гля	Ala	тте	GIY	_	гуѕ	Pro	Arg	
279		•	115			4 8		120					125				1.
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	Asn		Pro	Ala	His	Ile		Phe	Val	Ser	Ser	•	Val	Ser	Leu	Aṛg	
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292 294 296 300 302 303 306 307 310 311 314 315 318 319 322 323 326 327 330 331	<211 <212 <400 Asn 1 Ile Leu Gly Ala 65 Leu Ala Ile	L> LI 2> TY 3> OF 3> OF 3> OF Ala Lys Lys Gln 50 Ala Val Lys	ENGTH YPE: RGAN: RGAN: EQUEN Leu Leu Gln 35 Val Ala Ser Gln Leu 115	PRT ISM: ICE: Val Ala 20 Leu His Phe Asn Asp 100 Ala	Cand 6 Thr 5 Glu His Lys Ala 85 Trp	Gly Glu Ala Val Gly 70 Gly Ser Thr	Gly Val Trp 55 Ser Val Gln Phe	Ser Tyr Lys 40 Gln Pro Ala Met Ala 120	Arg Ser 25 Ala Leu Leu Gln Leu 105 Lys	10 Val Lys Asp Pro Phe 90 Ala	Thr Leu Leu Ala 75 Ser Ile	Ile Pro Ser 60 Ser Pro Asn Gly	Ala Ile 45 Asp Arg Phe Leu Asp 125	Ser 30 Val Val Tyr Ile Ala 110 Lys	15 Arg Lys Asp Asp Glu 95 Ala	Gly Gln Ala Val 80 His Pro	
292 294 296 300 302 303 306 307 310 311 314 315 323 326 327 330 331 334	<211 <212 <400 Asn 1 Ile Leu Gly Ala 65 Leu Ala	L> LI 2> TY 3> OF 3> OF 3> OF Ala Lys Lys Gln 50 Ala Val Lys	ENGTH YPE: RGAN: RGAN: EQUEN Leu Leu Gln 35 Val Ala Ser Gln Leu 115	PRT ISM: ICE: Val Ala 20 Leu His Phe Asn Asp 100 Ala	Cand 6 Thr 5 Glu His Lys Ala 85 Trp	Gly Glu Ala Val Gly 70 Gly Ser Thr	Gly Gly Val Trp 55 Ser Val Gln Phe Val	Ser Tyr Lys 40 Gln Pro Ala Met Ala 120	Arg Ser 25 Ala Leu Leu Gln Leu 105 Lys	10 Val Lys Asp Pro Phe 90 Ala	Thr Leu Leu Ala 75 Ser Ile	Ile Pro Ser 60 Ser Pro Asn Gly Asn	Ala Ile 45 Asp Arg Phe Leu Asp 125	Ser 30 Val Val Tyr Ile Ala 110 Lys	15 Arg Lys Asp Asp Glu 95 Ala	Gly Gln Ala Val 80 His Pro	
292 294 296 300 302 303 306 307 310 311 314 315 322 323 326 327 330 331 334 335	<211 <212 <400 Asn 1 Ile Leu Gly Ala 65 Leu Ala Ile	Lys Lys Lys Val Lys Ala Thr 130	ENGTH YPE: RGAN: RGAN: EQUEN Leu Leu Gln 35 Val Ala Ser Gln Leu 115 Pro	PRT ISM: ICE: Val Ala 20 Leu His Phe Asn Asp 100 Ala Ala	Cand 6 Thr 5 Glu Glu His Lys Ala 85 Trp Gln	Gly Glu Ala Val Gly 70 Gly Ser Thr	Gly Gly Val Trp 55 Ser Val Gln Phe Val 135	Ser Tyr Lys 40 Gln Pro Ala Met Ala 120 Phe	Arg Ser 25 Ala Leu Leu Gln Leu 105 Lys Val	10 Val Lys Asp Pro Phe 90 Ala Ala Ser	Thr Leu Leu Ala 75 Ser Ile Ile Ser	Ile Pro Ser 60 Ser Pro Asn Gly Asn 140	Ala Ile 45 Asp Arg Phe Leu Asp 125 Val	Ser 30 Val Val Tyr Ile Ala 110 Lys	15 Arg Lys Asp Asp Glu 95 Ala	Gly Gln Ala Val 80 His Pro	

RAW SEQUENCE LISTING DATE: 04/04/2006
PATENT APPLICATION: US/10/573,130 TIME: 10:13:06

Input Set : A:\Final Sequence list-13111-00035-US.txt

Output Set: N:\CRF4\04042006\J573130.raw

339	145	150	155
343	<210>	SEQ ID NO: 7	
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346	<213>	ORGANISM: Artificial sequence	
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349	<223>	OTHER INFORMATION: Primer: Mke 3	38
351	<400>	SEQUENCE: 7	
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361	<223>	OTHER INFORMATION: Primer: Mke 3	39
363	<400>	SEQUENCE: 8	
364	cgtage	gaag cttattgagc agtgtagc	28
		LENGTH: 28	restriction of the second seco
		TIPE: DNA	. 60
		ORGANISM: Artificial sequence	
		FEATURE:	
373	<223>	OTHER INFORMATION: Primer: Mke 3	66
375	<400>	SEQUENCE: 9	
376	acgaco	gacga gcaacgcbct bgtbacgg	28
		SEQ ID NO: 10	
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384	<220>	FEATURE:	
385	<223>	OTHER INFORMATION: Primer: Mke 3	67
387	<400>	SEQUENCE: 10	
388	acgac	acgt cgaacgcbct bgtbacgg	28
391	<210>	SEQ ID NO: 11	
392	<211>	LENGTH: 27	
393	<212>	TYPE: DNA	• •
394	<213>	ORGANISM: Artificial sequence	
		FEATURE:	
397	<223>	OTHER INFORMATION: Primer: Mke 3	74
		SEQUENCE: 11	
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		ORGANISM: Lactobacillus brevis	
		FEATURE:	
		NAME/KEY: MISC_FEATURE	
		LOCATION: (1)(10)	
412	<223>	OTHER INFORMATION: Fragment: C t	erminus

ige 6

```
<210>
       15
<211>
       60
       PRT
<212>
<213>
       Lactobacillus brevis
<220>
<221>
       VARIANT
<222>
       (47)..(47)
<223>
       Amino acid is Ala or Lys
<220>
<221>
       UNSURE
       (48) .. (48)
<222>
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       Amino acid is Lys or Ala
<220>
<221>
       VARIANT
<222>
       (53) . . (53)
       Amino acid is Pro or Thr
<223>
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<221>
       VARIANT
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       (59)..(59)
       Amino acid is Phe, Val, Gly, or Asn
<223>
<220>
<221>
       misc feature
<222>
        (60)..(60)
<223>
       Xaa is unreadable
<400>
       15
Ser Asn Arg Leu Asp Gly Lys Val Ala Ile Val Thr Gly Gly Thr Leu
                                                            15
Gly Ile Gly Leu Ala Ile Ala Thr Lys Phe Val Glu Glu Gly Ala Lys
            20
Val Met Ile Thr Gly Arg His Ser Asp Val Gly Glu Lys Ala Ala Lys
        35
                                                              explain "Xaa"
Ser Val Gly Thr Pro Asp Gln Ile Gln Phe Phe Xaa
                                The గ్రాంం of errors shown exist throughout
```

represent or Single a mino

the Sequence Listing. Please check subsequent coquences for similar errors.

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 04/04/2006 PATENT APPLICATION: US/10/573,130 TIME: 10:13:07

Input Set : A:\Final Sequence list-13111-00035-US.txt

Output Set: N:\CRF4\04042006\J573130.raw

## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

```
Seq#:15; Xaa Pos. 60
Seg#:16; Xaa Pos. 19,20
Seg#:17; Xaa Pos. 12,13,14,15
Seq#:18; Xaa Pos. 8
Seq#:19; Xaa Pos. 9,11,12,13,14,15
Seq#:22; Xaa Pos. 6,10,11,12,13,14,15
Seq#:23; Xaa Pos. 6,12,15,16,17,18
Seq#:24; Xaa Pos. 6,10,11,12,13,14,15,16,17
Seg#:25; Xaa Pos. 16,17,18,19,20
Seg#:26; Xaa Pos. 1,3
Seq#:27; Xaa Pos. 9,13
Seg#:28; Xaa Pos. 7,17,18,19,20
Seg#:30; Xaa Pos. 1,10,11,12,13,14,15,16,17,18,19,20
Seg#:32: Xaa Bos - 2-.30
5eq#:33; Ada ros. 5,0,7,0,3,10
Seq#:34; Xaa Pos. 3,13,14,15,16,17,18,19,20
Seq#:35; Xaa Pos. 11,12,13,14
Seq#:36; Xaa Pos. 1
Seq#:40; Xaa Pos. 1
Seq#:41; Xaa Pos. 2,39,40
Seq#:42; Xaa Pos. 37,38,39
Seq#:43; Xaa Pos. 12,13,14,15
Seq#:44; Xaa Pos. 13,14,15
```

VERIFICATION SUMMARY DATE: 04/04/2006
PATENT APPLICATION: US/10/573,130 TIME: 10:13:07

Input Set : A:\Final Sequence list-13111-00035-US.txt

Output Set: N:\CRF4\04042006\J573130.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:502 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:48 L:602 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:16 L:623 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0 L:640 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0 L:711 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0 L:806 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0 L:903 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0 L:907 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:16 L:929 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0 L:933 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:16 L:950 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0 L:954 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:16 L:976 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0 L:1063 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0 L:1160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0 L:1164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:16 L:1326 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0 L:1330 M:341 W: (46) "n" or "Xaa" used, for SEQ TD#:30 after pos.:16 ' L:1560 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:16 L:1577 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0 L:1638 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0 L:1642 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:16 L:1659 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0 L:1691 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0 L:1821 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0 L:1851 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:0 L:1859 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:32 L:1993 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:32 L:2010 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0 L:2072 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0